

# The Canadian Medical Association Journal

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THE CANADIAN MEDICAL ASSOCIATION

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## EDITORIAL

### CHEST X-RAYS

Controversial problems have come up from time to time concerning procedures in mass chest x-ray surveys and routine chest x-ray examinations in general hospitals. In order to clarify such problems a joint Committee representing the American College of Radiology and the American College of Chest Physicians met in San Francisco on June 26, 1950, and prepared a report. This was subsequently approved by the Board of Regents of the American College of Chest Physicians and by the Board of Chancellors of the American College of Radiology. It is hoped that this report will clarify controversial problems and also that the broad principles upon which it has been formulated may serve as a basis for solving any local situations which may arise.

In this report routine chest survey examinations are defined as examinations conducted on microfilm for screening normal persons to detect the presence or absence of a lesion. They are not to be considered as diagnostic procedures. The 14 x 17" film is fundamentally a diagnostic tool and its use, therefore, makes the examination more than a screening procedure.

Survey chest x-rays are approved as a screening device if conducted by agencies which utilize well qualified professional technical staffs, and which make a sincere effort to send the positive individuals to qualified local physicians or clinics for proper follow-up. Interpretation and reporting of medical findings is a medical matter and should bear the signature or identification of the responsible physician.

The Committee discourages the reporting of suspicious cases as tuberculosis, believing this to

be a clinical diagnosis. It is felt that even the larger film is but one of several examinations necessary in order to establish correct diagnoses.

The Joint Committee believes the radiologist and/or chest physician should be compensated, by arrangement between the physician and the hospital or agency involved, just as any other physician practising his profession. The procedure is time-consuming and places a definite responsibility on the radiologist or chest physician. In the reading of follow-up films there should also be an individual limit to the number of films read in any one day, and this should not be exceeded.

The number of lesions overlooked because of clothing (2%) is considerably smaller than the normal variations of interpretation. Since examination of the fully clothed persons is an easier procedure than that of the undressed persons, the Committee agreed that screening examination of the dressed person is as effective as that of the undressed.

At the present time there is no practical method which could be used to evaluate the qualifications of a particular reader. Studies in this respect are in progress. It is hoped that within a short period of time satisfactory testing methods will be available.

Lastly, the two Committees have agreed that the bi-committee arrangement should continue and another meeting will be arranged in at least one year. In an effort to have the Committees act continuously and without interruption, interim ideas can be sent to the respective Chairmen, and an exchange of opinions will continue during the meeting interval. A.H.N.

## Editorial Comments

### CHEMOTHERAPY

In its accepted modern sense chemotherapy may be defined as the treatment of infections by the chemical action of a drug or compound, which, acting on the infecting organism, so alters its metabolism that it dies or becomes incapable of thriving and multiplying. The former is bacteriocidal while the latter is bacteriostatic. Antibiotics are soluble antibacterial substances produced by moulds and other micro-organisms, when grown upon suitable media. All chemotherapeutic agents are toxic to the patient's tissues as well as the infecting organisms. The usefulness is measured by the chemotherapeutic

index or the ratio of the maximum tolerated dose to the minimal effective dose.

Ehrlich, in 1891, used methylene blue to treat malaria, the first chemotherapeutic agent. The forerunner of the sulfonamides, prontosil, was introduced by Domagk in 1935, since then there has been a continued flow of compounds, some of which have been outmoded.

Pyocyanese, prepared in 1899 by Emmerich and Low, was the first antibiotic, it was too toxic for clinical use, except for local application. In 1929 Fleming noticed the action of penicillin and in 1940 Florey used it to treat staphylococcal infections; since then a new field of medicine has been opened.

Chemotherapy is not a febrifuge treatment and should not be used as such. There is need for cautious thought and investigation before administering chemotherapeutic agents. The type of organism, the state of the patient's blood, the proposed duration of therapy, and the potential toxicity must all be considered. Sulfonamides and/or other chemotherapeutics may be used to confirm a differential diagnosis. Rheumatism is unresponsive to any form of chemotherapy, in fact such treatment is contra-indicated. In a doubtful case—acute rheumatism or acute osteomyelitis of the femur with sympathetic synovitis of the knee joint—an intensive 24 hour course of salicylates will relieve the pain of acute rheumatism and leave the osteomyelitis unaffected.

Ehrlich's theory of "Therapia magna sterilizans" or Stosstherapie, the giving of a single massive dose sufficient to inhibit any further growth

and multiplication of the infecting organism, and leaving the patient's own resistance to overcome the infection by natural phagocytosis," is the most satisfactory method of chemotherapeutic treatment.  
J.A.S.D.

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DR. ROBERT M. MCFARLANE

Our profession contains many who have made their mark in the world of sport, as well as the many, many more who with less distinction but just as much pleasure satisfy their sporting instincts: may it always be so. Occasionally however one man rises to supreme excellence as in the case of Dr. "Bob" McFarlane of the University of Western Ontario. In this part of Eastern Canada at any rate his name has long been amongst the great collegiate footballers, but his even more spectacular supremacy in track events has gained him laurels in national and international circles. To his many awards there now is added the National Amateur Athletic Achievement medal, granted by the National Council on Physical Fitness, for "outstanding achievement in the field of athletics, sports or games, reflecting credit on the nation, and in recognition of a career of good sportsmanship".

It is Dr. McFarlane's fourth such national honour, and we should like to add our felicitations for distinction so finely gained in upholding the best traditions of sport.

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## ASSOCIATION NOTES

### COMMENTS ON THE AMERICAN ACADEMY OF GENERAL PRACTICE

E. C. McCOY, M.D., Vancouver

[Dr. E. C. McCoy of Vancouver, B.C. was sent to the American Academy of General Practice annual meeting in San Francisco as the representative of the General Practitioner section of the C.M.A. and the following is his report as presented to the General Practitioner meeting in Montreal at the annual C.M.A. meeting in June, 1951.]

IN MAKING A REPORT TO YOU of my trip to the American Academy of General Practice (A.A.G.P.), in San Francisco I shall try to be brief—but of necessity shall have to go into considerable detail in places, as I realize that some of you know nothing or at most very little about A.A.G.P.

The day preceding their general meeting there was an all day meeting of the Congress of Delegates which is their business meeting—two delegates from each chapter or state, making a total of about a hundred delegates. This was most interesting and certainly their problems are very similar to ours except that so far they are doing a lot more about them. A report of business transacted would be of no interest to this group—excepting that they have finally ironed out a definition of a general practitioner; he is defined as "a legally qualified doctor of medicine who does not limit his practice to a particular field of medicine or surgery. In his general capacity as family physician and medical advisor he may, however, devote particular attention to one or more special fields—recognizing at the same time the need for consulting with qualified specialists when the medical situation exceeds the capacities of his own training or experience." I believe this definition is very satisfactory and might help us in our thinking.

It was an excellent well organized business meeting and in considering this I'm sure that